

BLANK PAGE



Indian Standard

SPECIFICATION FOR FLESHING KNIFE FOR LEATHER INDUSTRY

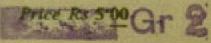
(First Reprint JUNE 1981)

UDC 675.053.31



@ Copyright 1972

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002



Indian Standard

SPECIFICATION FOR FLESHING KNIFE FOR LEATHER INDUSTRY

Leather Sectional Committee, CDC 16

Chairman

DB Y. NAYUDAMMA

Members

SHRI R. K. AGARWAL

SHRI H. R. GADI (Alternate) SHRI A. S. BHATTACHARYA

SHRI S. SAMPATH (Alternate) SHRI R. A. BHOTE

SHRI T. G. BOBADE

SHRI A. NAGAPPA CHETTIAR SHRI T. ABDUL WARID (Alternate)

SHRI O. P. DHAMIJA SHRI T. N. GANJWAR

SHRI J. GHOSH

SERI N. KANNAN

SHRI W. G. EDGAR (Alternate)

SHRI P. U. K. MENON

SHRI G. P. MADHAVAN (Alternate)

Shei K. V. S. Murthi Shei S. Nagarajan

SHRI S. P. SINGARAM (Alternate) PRINCIPAL

SHRI S. RAJA

SHRI T. RAJAGOPAL RAO

SHRI G. ROY CHAUDHURY

SHBI B. D. SENGUPTA (Alternate) SHRI N. R. SARKAR

SHRI P. K. SARKAR

Representing

Council of Scientific & Industrial Research,

New Delhi

Leather Research & Testing Laboratory (Directorate of Industries, Government of Uttar

Pradesh), Kanpur

Directorate General of Ordnance Factories

(Ministry of Defence), Calcutta

Directorate of Marketing & Inspection (Ministry of Agriculture), Nagpur

Ministry of Defence (R & D)

Leather Export Promotion Council, Madras

Export Inspection Council of India, Calcutta India Leather Corporation Limited, Madras

The State Trading Corporation of India Ltd, New Delhi

Ministry of Defence (DGI)

Gordon, Woodroffe & Co (Madras) Pvt Ltd,

Madras

Planning Commission

Development Commissioner, Small Scale Industries,

New Delhi

College of Leather Technology (Government of West Bengal), Calcutta

The Tanner, Bombay

The Associated Tanners, Vizianagaram

Export Promotion Council for Finished Leather &

Leather Manufactures, Kanpur

Bata Shoe Co Pvt Ltd, Calcutta

Indian Leather Technologists' Association, Calcutta

(Continued on page 2)

INDIAN STANDARDS INSTITUTION MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG

NEW DELHI 110002

(Continued from page 1)

Members

SHEI SANJOY SEN SHEI J. SINHA ROY (Alternate)

SHRI B. P. SENGUPTA

SHBI A. T. BABAK (Alternate)
*SHBI R. SNEBERGER
SHBI P. R. SONDHI

SHRI R. R. SONDHI (Alternate)
SHRI N. R. SRINIVASAN

SHRI Z. KHALIDI (Alternate)
SHRI R. THANJAN

SHRI R. S. GHOSH (Alternate)
SHRI D. DAS GUPTA,
Director (Chem)

(1m

The National Tannery Co Ltd, Calcutta

Representing

Directorate General of Supplies & Disposals (Inspection Wing), New Delhi

The Tanners' Federation of India, Kanpur Kapurthala Northern India Tanneries Ltd, Kapurthala

Tannery & Footwear Corporation of India Ltd, Kanpur

Directorate General of Technical Development, New Delhi

Director General, ISI (Ex-officio Member)

Secretary

SHRI S. DAS GUPTA Assistant Director (Chem), ISI

Hand Tools and Equipments for Leather and Leather Goods Industry Subcommittee, CDC 16:13

Convener

SHRI S. NAGARAJAN

Members

SHRI T. N. GANJWAR DR D. K. GHOSH SHRI T. K. NAG (Alternate) SHRI N. PAUL

SHRI N. PAUL SHRI S. RAJA

SHRI K. SESHAGANAPATHY RAO

Development Commissioner, Small Scale Industries, New Delhi

Nagappa Industrial Trading Corporation, Madras Khadi & Gramodyog Commission, Bombay

The Bengal Machinery Co Pvt Ltd, Calcutta Modern Tanners Cooperative Society Ltd, Bombay Central Leather Research Institute (CSIR), Madras

Shri R. Sneberger is also alternate to Shri N. R. Sarkar.

Indian Standard

SPECIFICATION FOR FLESHING KNIFE FOR LEATHER INDUSTRY

O. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 27 October 1971, after the draft finalized by the Leather Sectional Committee had been approved by the Chemical Division Council.
- 0.2 Fleshing knife is used in leather industry for fleshing operation in lime yard of tannery. It consists of two wooden handles and a steel blade.
- 0.3 This standard contains clause 6.1 which calls for agreement between the purchaser and the supplier.
- 0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS:2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for fleshing knife used in the leather industry.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS: 1640 - 1960† shall apply.

3. TYPES

- 3.1 The fleshing knife shall be of the following two types depending upon its use:
 - a) Heavy duty, and
 - b) Light duty.

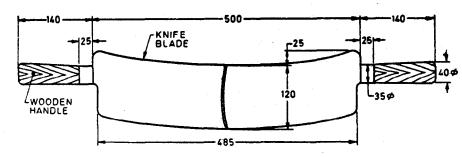
^{*}Rules for rounding off numerical values (revised).

[†]Glossary of terms relating to hides, skins and leather.

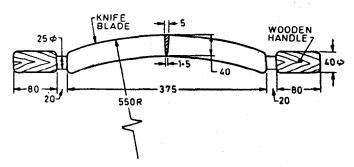
4. REQUIREMENTS

4.1 Materials

- 4.1.1 Blade The blade shall be made from steel conforming to Designation T90 of IS: 3749 1966*.
- 4.1.2 Handles The handles of the knife shall be made from wood and shall conform to the requirements of Class 5 of IS: 620-1965†.
- 4.2 Shapes and Dimensions The shapes and dimensions of the two types of the fleshing knife shall be as shown in Fig. 1.



IA Heavy Duty Fleshing Knife



IB Light Duty Fleshing Knife
All dimensions in millimetres.

Fig. 1 Fleshing Knife

^{*}Specification for tool and die steels for cold work. †General requirements for wooden tool handles (second revision).

4.3 Hardness — The hardness of the finished steel blade measured as near to the cutting edge as possible shall be 625 to 725 HV when tested according to IS: 1501 - 1968*.

4.4 General Requirements and Finish

- 4.4.1 The blade shall be suitably hardened and tempered and shall be smoothly ground. It shall also have a rust-preventing coating. The cutting edges shall be even and shall be capable of being sharpened by means of an oil stone to a keen edge ready for use.
- 4.4.2 The handle shall be evenly turned and shall be smoothly finished with shellac varnish (see IS: 347-1952†).

5. MARKING

- 5.1 Each knife shall be marked legibly with the following particulars:
 - a) Manufacturer's name or trade-mark, if any;
 - b) Type; and
 - c) Year of manufacture.

5.1.1 Each knife may also be marked with the ISI Certification Mark.

Note — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

6. PACKING

6.1 The blade of the knife shall be greased, wrapped in greased paper and securely tied. The knife shall then be packed as agreed to between the purchaser and the supplier.

7. SAMPLING AND CRITERIA FOR CONFORMITY

7.1 The scale of sampling and the criteria for conformity of the material in a lot to this standard shall be as prescribed in Appendix A.

8. TEST METHODS

8.1 The handles and the material and hardness of the blade shall be tested according to the relevant Indian Standards indicated under 4. Dimensions shall be checked by general measuring instruments.

^{*}Method for Vickers hardness test for steel (first revision). †Specification for varnish, shellac, for general purposes.

APPENDIX A

(Clause 7.1)

SAMPLING OF FLESHING KNIVES FOR LEATHER INDUSTRY

A-1. SCALE OF SAMPLING

- A-1.1 Lot In a consignment all the fleshing knives of the same type shall be grouped together to constitute a lot.
- A-1.2 Each lot shall be tested separately for determining its conformity to the requirements of this specification. The number of knives to be selected from a lot depends on the size of the lot and shall be in accordance with col 1 and 2 of Table 1.

TABLE 1 SCALE OF SAMPLING AND PERMISSIBLE NUMBER OF DEFECTIVES

(Clauses A-1.2 and A-2.1)

Number of Knives in the Lot	Number of Knives to be Selected	PERMISSIVE NUMBER OF DEFECTIVES	
(1)	(2)	(3)	
Up to 25	5	0	
26 to 50	8	0	
51 ,, 100	13	1	
101 ,, 200	20	1	
201 ,, 400	32	2	
401 ,, above	50	3	

A-1.3 These sample knives shall be selected at random from the lot. For random selection procedures, IS: 4905 - 1968* may be referred.

A-2. CRITERIA FOR CONFORMITY

- A-2.1 All the selected fleshing knives shall be examined for materials, shape, dimensions and general requirements and finish (see 4.1, 4.2 and 4.4). A knife failing in any one of these requirements shall be taken as a defective. The number of defectives shall not exceed the permissible number given in col 3 of Table 1 if the lot is to be accepted as satisfactory.
- A-2.2 Two knives if the lot size is 100 or below, and four knives if the lot size is above 100, shall be tested for the hardness of steel blade. There shall be no failure if the lot is to be accepted as satisfactory.

^{*}Methods for random sampling.

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

-		-	4000

Quantity	Unit	Symbol	
Length	metre	m	
Mass	kilogram	kg	
Time	second		
Electric current	ampere	A	
Thermodynamic temperature	kelvin	K	
Luminous intensity	candela	cd	
Amount of substance	mole	mol	
Supplementary Units			
Quantity	Unit	Symbol	
Plane angle	radian	rad	
Solld angle	steradian	er .	
Derived Units			
Quantity	Unit	Symbol	Conversion
Force	newton	N	1 N - 1 kg.1 m/s"
Energy	Joule	J	1 J = 1 N.m
Power	watt	W	1 W - 1 J/s
Flux	weber	Wb	1 Wb - 1 V.s
Flux density	tesla	T	1 T - 1 Wb/m1
Frequency	hertz	Hz	1 Hz = 1 c/8 (s-1)
Electric conductance	slemens	S	1 S-1 A/V
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ^s

INDIAN STANDARDS INSTITUTION

Hantex Bldg (2nd Floor), Rly Station Road

Manak Bhavan, 9 Bahadur Shah Zafar Marg, Ni Telephones: 26 60 21, 27 01 31	Telegrams: Manak	sanst	ha
Regional Offices:	T	elepho	ne
Western : Novelty Chambers, Grant Road	BOMBAY 400007	37 97	29
Eastern : 5 Chowringhee Approach	CALCUTTA 700072	23-08	02
Southern : C. I. T. Campus, Adyar	MADRAS 600020	41 24	42
Branch Offices:			
'Pushpak', Nurmohamed Shaikh Marg, Khanpur	AHMADABAD 380001	2 03	91
'F' Block, Unity Bldg. Narasimharaja Square	BANGALORE 560002	2 76	49
Gangotri Complex, Bhadbhada Road, T.T. Nagar	BHOPAL 462003	6 27	16
20E Kalpana Area	BHUBANESHWAR 751014	5 36	27
Ahimsa Bldg, SCO 82-83, Sector 17C	CHANDIGARH 160017	2 83	20
5-8-56C L. N. Gupta Marg	HYDERABAD 500001	22 10	83
D-277 Todarmal Marg, Banipark	JAIPUR 302006	6 98	32
117/418 B Sarvodaya Nagar	KANPUR 208005	8 12	72
Patliputra Industrial Estate	PATNA 800013	6 28	80

32 27

TRIVANDRUM 695001